Safety Summary

SAFETY SUMMARY ..... SAFE 01-0000

Copyright © 2010, Hitachi, Ltd.

This page is for editorial purpose only.

Copyright © 2010, Hitachi, Ltd.

⚠ SAFETY SUMMARY

NOTE: In this chapter, some precautions for the safety usage of Hitachi Data Ingestor.
For the precautions to handle each hardware (node) that composes Hitachi Data Ingestor safely, refer to the manuals provided by the respective hardware vendors.

⚠ About the symbol

⚠	This is the safety warning icon. It is used to alert you to hidden personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.
⚠ **DANGER :**	Indicates a hazardous situation which, if not avoided, will result in serious injury or death.
⚠ **WARNING :**	Indicates a potentially hazardous situation which, if not avoided, will result in serious injury or death.
⚠ **CAUTION :**	Indicates a hazardous situation which, if not avoided, will result in slight or moderate injury.
NOTICE :	Indicates a hazardous situation which, if not avoided, could result in damage not related to personal injury.

⚠ General Safety Guidelines

Read the following safety guidelines carefully and follow them when you conduct maintenance of the machine.

Before starting maintenance

- Maintenance of the machine must be done only by trained and qualified engineers.
- Read and follow the safety guidelines and procedures in this manual.
- In this manual and on the machine, hazard warnings are provided to aid you in preventing or reducing the risk of death, personal injury, or product damage. Understand and follow these hazard warnings fully.
- Keep in mind that the hazard warnings in this manual or on the machine cannot cover every possible case, as it is impossible to predict and evaluate all circumstances beforehand.
  Be alert and use your common sense.
- The Fibre Channel used in the HBA installed in the node of Hitachi Data Ingestor is “Class 1 Laser System”, which does not output the hazardous laser light. See “SAFETY: Equipment with Laser Devices” manual issued by the hardware vendor. And operate the device in accordance with this manual and the “SAFETY: Equipment with Laser Devices” manual issued by the hardware vendor.

  Do not operate the device other than the operations described in this manual or the “SAFETY: Equipment with Laser Devices” issued by the hardware vendor. Doing those kind of operations may cause of an unexpected failure or an accident.

Copyright © 2010, 2012, Hitachi, Ltd.

⚠ SAFETY SUMMARY (CONTINUED)

During work

- For each procedure, follow the given method and sequence of steps.
- Use the spare, consumables, and materials for maintenance which are specified in the manual; otherwise, personal injury or damage of the machine, as well as deterioration of the product's quality, may result.
- Use the special tools and instruments specified for the work in the manual or commercially available tools and instruments which fit the purpose.
- Use measurement instruments and powered tools which are properly calibrated or periodically inspected.
- Keep the maintenance area neat and tidy.
- Always put away parts, materials, or tool when not in use.
- Wear an eye protector where liquid may splash or anything may fly about.
- When lifting anything heavy, lift it using your legs with your back kept erect, to prevent injury to your back or spine.
  When lifting anything, for the weight of which CAUTION is indicated, use a proper lifting tool or have somebody help you.
- When using sharp objects or cutting tools, make sure that no part of your body lies in the path of the blade, or point.
- Before finishing your work, check if the subsystem is returned to its original state. (Make sure that all parts removed during maintenance have been installed back in their original positions in the machine. Make sure that no tool or foreign material left in the machine.)

Copyright © 2010, Hitachi, Ltd.

⚠ SAFETY SUMMARY (CONTINUED)

Prevention of electric shocks

- Before starting work, make sure that, unless otherwise specifically instructed, there is no potential electric hazard in the maintenance area such as insufficient grounding or a wet floor.
- Before starting work, note where the emergency power-off switches are located and make sure you know how to operate them.
- Unless otherwise specifically instructed, cut off all power sources to the machine before starting maintenance. Just switching off the machine power supplies is usually not enough.
  When power is fed from a wall or floor outlet, unplug the power supply cord, or turn off the switch on the power distribution panel or board.
  Attach a notice on the panel or board prohibiting the use of the switch.
  When the power supply has a lockout device[1], lock it up after the powering off and keep the key.
  If the machine power has been already turned off, make sure yourself that these conditions are satisfied.
  Use an instrument depending on circumstances.

  [1] The following is a portion of 29 CFR 1910.147 "The control of hazardous energy (lockout/tagout)," in the OSHA (Occupational Safety & Health Administration U.S. Department of Labor USA) Regulations.

  - *Lockout device*. A device that utilizes a positive means such as a lock, either key or combination type, to hold an energy isolating device in the safe position and prevent the energizing of a machine or equipment. Included are blank flanges and bolted slip blinds.
  - *Energy isolating device*. A mechanical device that physically prevents the transmission or release of energy, including but not limited to the following: A manually operated electrical circuit breaker; a disconnect switch, a manually operated switch by which the conductors of a circuit can be disconnected from all ungrounded supply conductors, and, in addition, no pole can be operated independently; a line valve; a block; and any similar device used to block or isolate energy. Push buttons, selector switches and other control circuit type devices are not energy isolating devices.
- Do not touch any uninsured conductor or surface, where so instructed, which remains charged for a limited time after the external power supply to the machine is disconnected.
- When working on a machine which has a grounding terminal, make sure that the terminal is properly connected to the facility's ground.
- When working close to a hazardously energized part, do not work alone; work with another person who can immediately turn off the power in an emergency.
- Do not wear any metallic item such as a wrist watch with a metallic surface, or metallic accessories.
  If you wear eyeglasses with a metallic frame, take care not to let the frame touch an uninsured surface.
- Make sure that your hands and arms are dry.

Copyright © 2010, Hitachi, Ltd.

⚠ SAFETY SUMMARY (CONTINUED)

- Unless otherwise specifically instructed, use only one hand when it is necessary to work near an exposed live electric circuit.
  This prevents the completion of the circuit through both hands even if you accidentally touch the circuit.
- Do not use a dental mirror near an exposed live electric circuit.
  The mirror surface is conductive and can become hazardous even if it is made of plastic.
- Unless otherwise specifically instructed, do not supply power to any subassembly such as a power supply unit or a motor while it is removed from the machine.

Preventing being caught by rotating or moving parts

- Tuck in your tie, scarf, shirt, or any other loose clothing so that it will not be caught by a rotating or moving part.
- Tie up long hair.
- Unless otherwise specifically instructed, do not supply power to any device with rotating or moving parts which are not properly covered.
- When instructed to supply power to any device with rotating or moving parts whose covers have been removed, work with another person who can immediately turn off the power in an emergency.

Procedure in an emergency

For electric shock

- Do not panic. Do not become another victim through contact with the injured person.
- First, shut off the electric current passing through the victim.
  Use the emergency power-off switch, if there is one, or otherwise, a normal power-off switch.
  If this cannot be done, push the victim away from the source of the electric current by using a nonconductor object such as a dry wooden stick.
- Call an ambulance.
- If the victim is unconscious, artificial respiration may be necessary
  A proper method for performing artificial respiration or resuscitation should be learned beforehand.
  If the victim’s heart is not beating, cardiac resuscitation should be performed by a trained and qualified person.

For outbreak of fire

- First, shut off all the current supply from the machine using the emergency power-off switch, if there is one, or otherwise, a normal power-off switch.
- If the fire continues burning even after the current supply is shut off, take suitable actions including the use of a fire extinguisher or a call for the fire department.

Copyright © 2010, Hitachi, Ltd.

SAFETY SUMMARY (CONTINUED)

Warning displayed in manual

The warning messages described in this manual and where they are described are shown below collectively.

Message displayed as **CAUTION**

- To prevent a rack frame fall, install the heavier devices on the lower positions as much as possible. The devices must be installed in the order of a position from the bottom. Please make sure when you install nodes on your rack frame.

R710 (A.4 Installing the Nodes)
RS220xK (A.4 Installing the Nodes)
CR210HM (A.4 Installing the Nodes)
D51B-2U (A.4 Installing the Nodes)

Message displayed as ***NOTICE***

- Before starting the operations, wear a wrist strap on your wrist and connect the earth clip at the other end of the cable connected to that wristband to the subsystem frame (metal part). Do not put off the wrist strap until the operation is completed.

(INST 01-0040)

- When installing a node, support the sheet-metal part with your hand wearing the wrist strap. Touching the sheet-metal part discharges static electricity.

(INST 01-0040)

- Do not turn the power off while BIOS update because it can cause a serious problem with starting up the node. To Eject “System BIOS Update Tool” FD media or key input operation during BIOS update is also prohibited.
  These kind of operations can cause rewrite failure and result in damage to the motherboard.

RS220xK (B.2.1 BIOS Version Checking Procedure)
CR210HM (B.2.1 BIOS Version Checking Procedure)

Copyright © 2011, 2015, Hitachi, Ltd.

This page is for editorial purpose only.

Copyright © 2011, 2012, Hitachi, Ltd.